REMARKS/ARGUMENTS

Claims 1-28 were pending in this application before the present response.

In the Office Action dated July 6, 2007, claim 28 stands rejected under 35 U.S.C. § 101, and claims 1-28 stand rejected under 35 U.S.C. § 103(a).

Claims 9, 10, 12, 23, 24, 26 and 28 have been amended in this response, and the specification has been amended to correct a typographical error. No new matter is added by the amendments. Claims 1-28 are now pending in this application. Applicant respectfully requests reconsideration and allowance of all pending claims, in view of the amendments and following remarks.

Information Disclosure Statement

The Examiner has indicated that a copy of the non-patent literature publication by G. Keesman et al., entitled "Transcoding of MPEG Bitstreams" (hereinafter "Keesman"), was not filed with the Information Disclosure Statement (IDS) of June 4, 2004, and therefore the reference was not considered.

Applicants have filed a Supplemental IDS and a copy of the Keesman publication herewith. Applicants further note that the author's name was misspelled as "Kessman" on the Information Disclosure Statement of June 4, 2004, and have corrected the citation in the Supplemental IDS filed herewith.

Claim Rejections – 35 U.S.C. § 101

Claim 28 stands rejected under 35 U.S.C. § 101. By the amendment herein, Applicants have clarified that the claim is not directed impermissibly to a carrier wave or signal, but rather to a computer readable medium comprising program instructions for causing a computer to process a bitstream. It is believed that this amendment cures claim 28 of the alleged failure to claim statutory subject matter. Applicants request that the rejection be withdrawn.

Claim Rejections – 35 U.S.C. § 103

Claims 1-28 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over U.S. Patent No. 5,687,095 to Haskell et al. in view of U.S. Patent Application Publication 2002/0106022 A1 to Satoh et al.

With respect to independent claims 1, 13, 26, 27, and 28, and each of the dependent claims 2-12 and 14-25 which incorporate all of the limitations of their respective parent claims, Applicants respectfully traverse the rejection.

As the Examiner has stated at page 4 of the Office Action, "Haskell et al. does not explicitly teach normalizing the spatial activity value, as shown in step (d) of claim 1 and 13." Accordingly, Haskell et al. also does not and cannot teach employing a function of the adjustment factor in a normalization function by "computing a normalized spatial activity value … in response to … a function of said adjustment factor", as expressly required by independent claims 1, 13, 27, and 28, and each of their dependent claims.

Satoh et al. fails to remedy the absence of "computing a normalized spatial activity value … in response to … a function of said adjustment factor." The adjustment factor (rcFactor) of the present invention relates the bit-size of a selected frame to the target bit-size for the selected frame. Satoh et al. fails to disclose the use of an adjustment factor that relates the bit-size of a selected frame to the target bit-size for the selected frame, and more particularly, Satoh et al. fails to disclose "computing a normalized spatial activity value … in response to … a function of said adjustment factor." Because Satoh et al. does not teach such an adjustment factor, Satoh et al. also does not and cannot teach employing a function of the adjustment factor in the normalization function.

The Office Action supposes that it would be obvious "to generate a picture complexity measure according to specific picture details as taught by Satoh et al., since Satoh et al. states in paragraph [0025] that such a modification would be useful to generate an accurate calculation for the number of bits to allocate to a transcoded frame." However, the picture complexity measure (normalized activity $Nact_j$) disclosed in Satoh et al. is not "a normalized spatial activity value … [computed] *in response to … a function of said adjustment factor*" (emphasis added). Furthermore, paragraph [0025] of

Satoh et al. contains no statement concerning the usefulness of computing a normalized spatial activity value in response to the adjustment factor.

The Office Action cites Satoh et al., at page 6 of the Office Action, as "giv[ing] a normalized activity calculation identical to that presently claimed (paragraph 38)." Applicants respectfully traverse any characterization of the calculation taught by Satoh et al. as "identical," at least because Satoh et al. does not calculate a normalized activity using the adjustment factor of the present invention. Satoh et al. merely uses a constant value of 2 in calculating normalized activity (paragraph [0038], equation 22).

With respect to claims 9 and 23, and claims 10-11 and 24-25 which depend respectively therefrom, Applicants respectfully traverse the Examiner's characterization of "2," as used in equation 22 of Satoh et al., as a "constant function" of the adjustment factor of the present invention (Office Action, p. 6.), at least because Satoh et al. nowhere teaches or discloses any relationship of the number "2" to an adjustment factor that relates the bit-size of a selected frame to the target bit-size for the selected frame. However, Applicants have amended claims 9 and 23 to expressly recite the limitation "wherein f is not a constant function" to provide additional clarity. Claims 10 and 24 have also been amended to more clearly define f(rcFactor) as the "function of said adjustment value" as that term is used in step (d) of the respective parent claims.

With respect to claim 12, Applicants do not agree that Satoh et al. "discloses the claimed invention except for the value of rcFactor," and respectfully traverse the characterization of "1" as an "optimum value" of rcFactor. (Office Action, p. 7.) In the exemplary definition of rcFactor shown in Equation 1 of the present specification (page 7, paragraph [0027]), rcFactor would be equal to one when the number of bits representing a selected frame is equal to the target number of bits for the selected frame. More generally, it is apparent that where the existing bit-size and the target bit-size are identical, no adjustment to the quantization level associated with the input bitstream is needed to account for a difference in bit-size. For greater clarity, claims 10, 12, and 24 have been amended to expressly include the limitation that "said number of bits is not equal to said target number of bits".

With respect to independent claim 26, the claim has been amended to include a limitation to the controller "wherein said quantization adjustment factors relate a number

of bits representing a selected frame defined by said input bitstream to a target number of bits for said selected frame, and wherein said number of bits is not equal to said target number of bits." Neither Haskell et al. nor Satoh et al. discloses a controller having the aforesaid feature.

Since Satoh et al. fails to supply features missing from Haskell et al., the combination of Haskell et al. and Satoh et al. cannot suggest the invention and cannot render the claims obvious. Thus, no matter how Haskell et al. and Satoh et al. may be combined (even assuming, arguendo, that one of ordinary skill in the art would be led to combine them) the resulting combination is not the invention recited in any of independent claims 1, 13, 26, 27 and 28. Likewise, all of the dependent claims 2-12 and 14-25, which depend, respectively, on claims 1 and 13 and incorporate all of the limitations thereof, are similarly patentable.

Accordingly, Applicants respectfully request withdrawal of the rejection of claims 1-28 under 35 U.S.C. § 103(a).

Conclusion

In view of the foregoing discussion, it is believed that claims 1-28 are allowable over the cited art. Applicants respectfully submit that all pending claims, as amended, are in condition for allowance, and earnestly request that all objections and rejections of the claims be withdrawn and a Notice of Allowance be entered at the earliest date possible.

Should the Examiner feel that there are any issues outstanding after consideration of this response, the Examiner is invited to contact Applicants' undersigned

representative to expedite prosecution.

Respectfully submitted,

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